

REMARKS/ARGUMENT

Applicants propose amending reference numeral “26” in Figure 11 to instead be “46”. Applicants further propose amending reference numeral “327” to instead be “427”. The proposed amendment overcomes the Examiner’s objection to the drawings.

Claims 1, 8-12, 25, 26 and 35-39 stand allowed.

Claims 2-3, 13-18, 20-24, 27, 30, 40-42 and 46-52 would be allowable if rewritten or amended to overcome the objections set forth in the Office Action. Applicants have amended objected to Claims 2-3, 13-24, 27-31, 40-50 and 52 in conformance with the Examiner’s recommended changes. Applicants have amended Claim 51, lines 9 and 10 as recommended by the Examiner. Applicants have not, however, amended Claim 54, line 4 as recommended by the Examiner since the recommended language is confusing. If the Examiner’s language were to be added, the resulting language in Claim 51 would be “the regeneration-factor processor determining a regeneration factor associated with each user from a plurality of users based on a received signal to produce a regeneration-factor signal” and Applicants fail to see why any such change is needed. As a result, Claims 2-3, 13-18, 20-24, 27, 30, 40-42 and 46-52 now stand allowable.

Claims 5-6, 28-29, 32-33 and 43-44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, as set forth in the Office Action. By this amendment, Applicants have amended the above identified claims to overcome the rejection. Accordingly, Claims 5-6, 28-29, 32-33 and 43-44 now stand allowable.

Claims 7, 19, 31, 34, 45 and 53-54 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in the Office Action. Applicants appreciate the Examiner's determination that these claims would be allowable if amended to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, but Applicants respectfully submit that, for the reasons set forth below, the claims are allowable in their current form.

Regarding Claims 7, 19, 34 and 45, the Examiner states that nowhere in the specification or drawings do Applicants describe that the first and the second user or each user from the plurality of users is performed "substantially in series". Applicants respectfully respond that the examiner is correct in the sense that nowhere does the specification specifically set forth "substantially in series" verbatim. However, the whole idea of "regenerative" is that the original signal is processed to generate a new lower-interference signal which in turn will be processed again in the next stage. So while the same HW is re-used in numerous stages, from a functional point-of-view the processing

is done in series, i.e. the output of the 1st processing stage becomes the input to the 2nd processing stage, etc. This “chaining” of processing stages is found in several places in the document, for instance:

§ 0020: “A regenerated signal is then **modified based on its regeneration factor to produce a modified regenerated signal for each user**”, and

§ 0031 “This interference-cancelled **signal for the first user can then be provided back into the rake receiver 120 for the first user and again processed** further to cancel interference from this signal”.

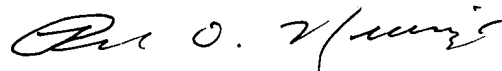
Accordingly, there is support in the specification under 35 U.S.C. 112, first paragraph, for Claims 7, 19, 34 and 45. The 35 U.S.C. 112, first paragraph, rejection of Claims 7, 19, 34 and 45 should be withdrawn.

The examiner further argues that the specification fails to discuss the estimation of a phase and an amplitude of each multipath component associated with a received signal based on a pilot signal as recited in claim 31 and also a low-pass filter as recited in claims 53-54. As above, Applicants traverse this determination. Fig. 5 is a block diagram of a channel estimator. Its use is described in § 0047, 0049, 0059, 0060, 0070, and 0071. As far as the low-pass filter is concerned, this device is mentioned (although spelled “lowpass”) and its use in the invention is described in § 0050, 0051, 0052. The latter section even gives an example of a filter coefficient. Accordingly, there is support

in the specification under 35 U.S.C. 112, first paragraph, for Claims 31 and 53-54. The 35 U.S.C. 112, first paragraph, rejection of Claims 21 and 53-54 should be withdrawn.

Claims 1, 8-12, 25, 26 and 35-39 stand allowed. Objected to Claims 2-3, 13-24, 27-31, 40-50 and 52 have been amended to be allowable. Claims 5-6, 28-29, 32-33 and 43-44 have been amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and are therefore allowable. Claims 7, 19, 34 and 45 are allowable over 35 U.S.C. 112, first paragraph, for the reasons set forth above. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,



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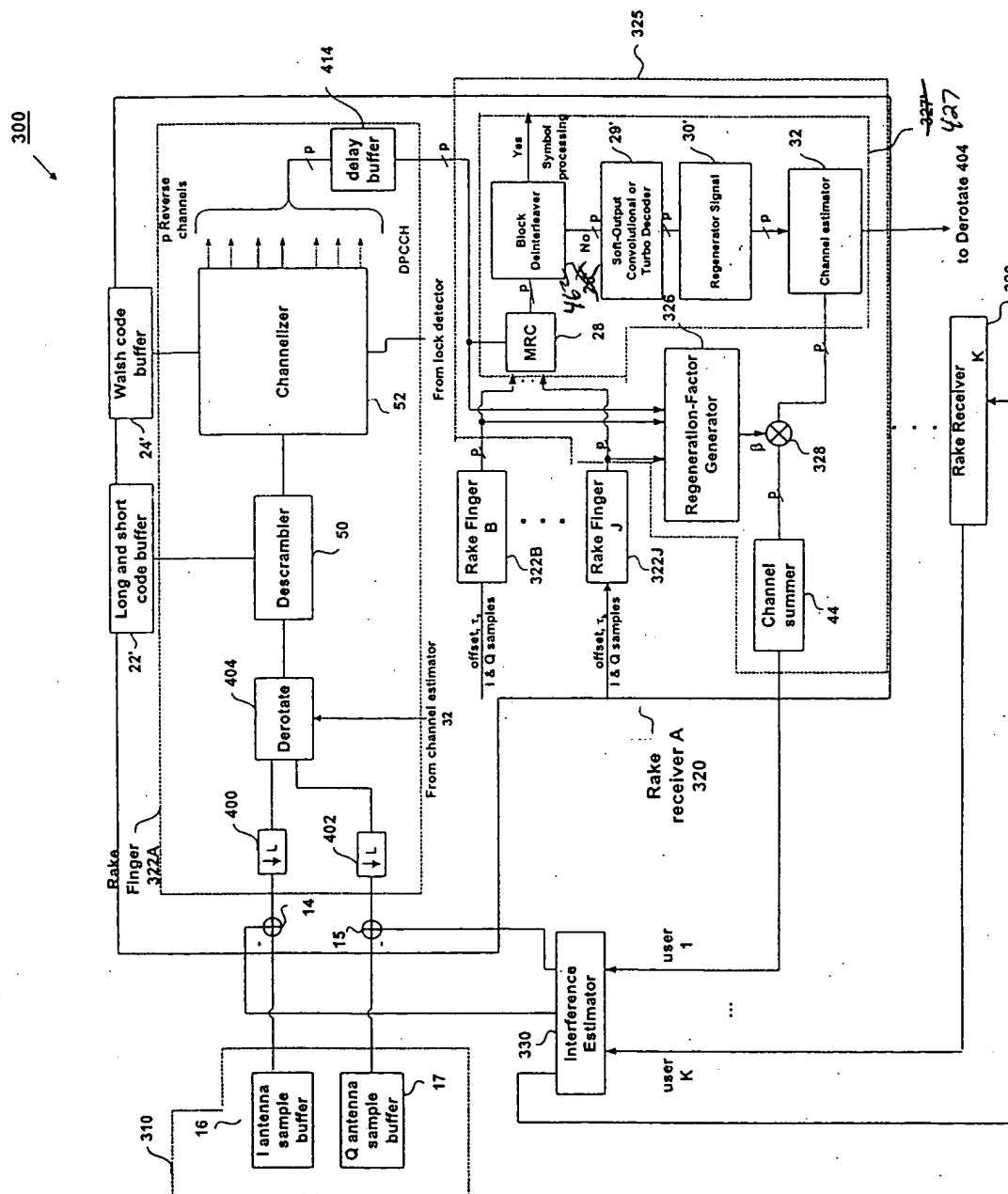


FIG. 11